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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/360,025	07/23/1999	SHINKEN OKAMOTO	2418.05-US-0	3581

7590 12/11/2002

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EXAMINER

LAMARRE, GUY J

ART UNIT

PAPER NUMBER

2133

DATE MAILED: 12/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/360,025

Applicant(s)

OKAMOTO, SHINKEN 

Examiner

Guy J. Lamarre, P.E.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Response to Amendment

0. This office action is in response to Applicants' amendment (paper # 6), filed on 25 September 2002.

0.1 Original Claims 1-12 are cancelled. Claims' 13-24 are added. Claims 13-24 are presented for examination.

0.2 The prior art rejection of record to Claims 1-12 under 35 U.S.C. 102, as set forth in the office action of 20 June 2002, due to cancellation of said claims, is withdrawn in response to Applicants' amendment, filed on 25 September 2002.

Reassignment Affecting Application Location

0.3 The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2133.

Response to Arguments

0.4 Applicants' arguments, filed 25 September 2002, have been fully considered, and are deemed persuasive only to the extent that the approach, whereby 'display means is provided in memory device,' is not specifically disclosed by the prior art of record. **Yoshito et al.** teaches display means for a memory card as claimed.

Claim Objections

1. It is not clear, in Claim 19 line 1, what is meant by "a spare memory are."

It is also not clear, in Claim 22 line 10, what is meant by "processor drives outputs."

Appropriate correction is required.

Claim Rejections - 35 USC § 112 SECOND PARAGRAPH

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2.0 Claims 19 and 22 and intervening claims stand rejected under 35 USC § 112 SECOND PARAGRAPH for failing to particularly point out and distinctly define the subject matter which the applicant regards as his invention.

As per Claims 19 and 22, and intervening claims: It is unclear how the processor is operatively connected to the display.

Claim Rejections - 35 USC ‘ 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3.1 Claims 13-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Yamagami et al.** (US Patent No. 6,130,837; 25 November 1992) in view of **Yoshito et al.** (JP Publication No. 62290989; 17 December 1987).

As per Claims 13, 16, 19, 22, Yamagami et al. substantially discloses, in Figs. 2 and 10, the procedure for the claimed memory unit comprising: a memory having a main memory area (block 21) and a spare memory area or write buffer (block 29), wherein said main memory area includes a plurality of data storage registers and wherein each of said data storage registers has an address, and wherein said spare memory area has a storage capacity; a display or status table (block 28); and a processor (block 23), wherein said processor transfers data stored in each of said addresses of said main memory area to said spare memory area upon a number of write operations performed to a respective one of said addresses in said main memory reaching a predetermined value (or frequency of error Fig. 2)), and wherein said processor drives said display or status table to indicate or display storage capacity status or condition. {See

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Yamagami et al., Figs. 2 and 10, and related description, in passim, wherein apparatus and method (including error frequency means in Fig. 2 and associated description in col. 4 line 61 et seq.) are described.} **Not specifically described** in detail in **Yamagami et al.** is the step whereby memory indicating means is via a **display means for displaying** remaining amount of said storage capacity in said spare memory upon a remaining amount of said storage capacity reaching a predetermined remaining capacity. **However** such approach is well known. For example, **Yoshito et al.**, in an analogous art, discloses a “Memory Card,” wherein such techniques are described. {See **Yoshito et al.**, Id., ABSTRACT.} **Therefore**, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the procedure of **Yamagami et al.** by including therein a **display means** as taught by **Yoshito et al.**, because such modification would provide the procedure disclosed in **Yamagami et al.** with a technique whereby “*storage capacity of a memory is visually provided via a display terminal.*” {See **Yoshito et al.**, ABSTRACT.}

As per Claims 14, 17, 20, 23, Yamagami et al. substantially discloses, in col. 13 line 13 et seq., the procedure for the claimed memory unit as in claim 13, wherein said processor compares said remaining amount of said storage capacity with a plurality of different values of said predetermined remaining capacity, wherein the comparison produces a plurality of different results, and wherein said processor drives said display or external unit in different manners dependent upon said plurality of different results.

As per Claims 15, 18, 21, 24, Yamagami et al. substantially discloses, in Fig. 4 and col. 6 line 2 et seq., the procedure for the claimed memory unit as in claim 13, wherein said processor drives the display upon said number of write operations or error frequency (col. 4 line 61 et seq.) performed to a respective one of said addresses in said main memory reaching a predetermined number or frequency (col. 4 line 61 et seq.).

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Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references cited in Form PTO-892 are for the Applicant's review and comments.

4.1 Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

4.2 Any response to this action should be mailed to:

Commissioner of Patents and Trademarks, Washington, D.C. 20231

or faxed to:

(703) 746-7238, (for After-Final communications),

(703) 746-7239, (for formal communications intended for entry),

(703) 746-5463 (for informal or draft communications, please label "PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guy J. Lamarre, P.E., whose telephone number is (703) 305-0755. The examiner can normally be reached on Monday to Friday from 9:30 AM to 6:00 PM.

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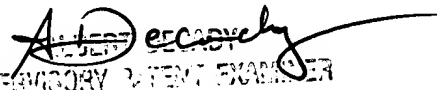
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert De Cady, can be reached on (703) 305-9595.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Guy J. Lamarre, P.E.



Patent Examiner


SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

12/2/02
